Hawaii Youth Tobacco Survey (HYTS) Selected Indicators for Middle School and High School, 2000 and 2003

Overview

From spring to 2000 to fall 2003 the impact of tobacco on lives of Hawaii's youth has decreased.

Tobacco use, especially cigarette use, has declined dramatically.

- In middle school (MS) lifetime cigarette use dropped from 38.4% to 21.1%, current smoking went from 12.9% to 5.3%, and frequent smoking halved from 2.1% to 0.9%.
- In high school (HS) lifetime cigarette use dropped from 63.3%% to 47.8%, current smoking went from 24.5% to 14.9%, and frequent smoking halved from 10.3% to 5.4%.
- Yet, among those who do smoke, 18.7% of MS and 29.8% of HS students can't go one day without feeling like they need a cigarette.

Students reporting smoking on campus in the past month has decreased over 40%.

- 2.5% of MS and 6.9% of HS students smoked on campus (from 5.8% and 12.2%).
- Yet, in 2003, prior to the public school smoking ban, 22.0% of MS students and 34.5% of HS students knew of school employees or staff who smoked on campus.

Access to tobacco has been decreased.

- The proportion of underage smokers who usually get their cigarettes from a store has decreased from 7.4% to 3.2% in MS and from 25.9% to 9.3% in HS.
- Only about one-third of MS and HS smokers under 18 years old who bought cigarettes in the past month were asked to show ID or were refused sale.

Most students who do smoke now are trying to quit.

- 63.1% of MS and 68.1% of HS current smokers tried to quit smoking in the past year.
- 37.3% of MS and 44.1% of HS smokers were unable to stay quit for one month during their last attempt.

Media

- 71.8% of MS and 80.1% of HS students have seen or heard an anti-tobacco ad in the past month, and 2 in 5 have seen or heard an ad at least once a day.
- 75.7% of MS and 83.4% of HS students regularly see ads for tobacco and tobacco products in stores and 1 in 10 students bought or received merchandise with a tobacco logo in the past year.

Exposure to second hand smoke (SHS) in the past week has decreased:

- 40.0% of MS and 57.6% of HS were exposed to SHS in a room, from 53.7% and 68.0%.
- 33.0% of MS and 39.3% of HS students were exposed in a car, from 40.0% and 49.4%.
- Despite the many successes in tobacco prevention and education, 1 in 5 MS and HS never smokers are susceptible to starting smoking. Those who do smoke are getting cigarettes through pathways that do not require them to show proof of age. Students frequently see actors smoking on TV and in movies and many believe that smoking is a way to look cool or fit in and that those who smoke have more friends. Students routinely overestimate the prevalence of smoking among their peers. The majority of healthcare professionals do not discuss smoking with their patients. Comprehensive tobacco control strategies addressing to prevent initiation, promote cessation, and reduce exposure to SHS are working and need to be reinforced through policy, media and community interventions.

Background and Methods

Tobacco is the single leading preventable cause of death in the United States accounting for approximately 430,000 deaths each year and over 1,100 deaths in Hawaii. The Youth Tobacco Survey (YTS) was designed by the Centers for Disease Control and Prevention (CDC) in collaboration with the participating states. YTS surveys are conducted at the national, state and city level. Additionally, many countries participate in the global YTS allowing for comparison across all participating areas. The 2003 Hawaii YTS data used in this report were collected using a self-administered survey format and employed a modified census survey design. All public schools with students in grades 6 through 12 were selected to participate. Schools containing grades 6, 7, or 8 were included in the middle school sampling frame, and those with grades 9, 10, 11, or 12 were included in the high school frame. In all, 99.4% of eligible schools and 72.7% of eligible students (n=10,641) participated in the Middle School survey for an overall response rate of 72.2%. The Middle School data is weighted to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of nonresponse. At the High School level, 97.7% of eligible schools and 57.5% of eligible students (n=9,575) participated for an overall response rate of 56.2%. The High School data did not meet the 60% overall participation threshold required by the CDC for weighting data and, hence, is not weighted. Additional details on the methods can be found at www.cdc.gov/mmwr. Table 1 in the appendix gives more detailed demographic information on the 2003 HYTS respondents. This overview will give key middle school and high school survey results for 2003 and compare them with the results from the 2000 HYTS. Where possible, 2004 NYTS data is provided for reference¹. Future reports will examine ethnic and gender differences and trends by grade level in the key tobacco indicators presented here. The CDC expects to publish the 2003 National Youth Tobacco Survey (NYTS) report this summer.

Key Findings

Prevalence

Seven in 10 middle school (MS) students and almost 1 in 2 high school (HS) students have never tried a tobacco product; however, 29.6% of middle school (MS) students and 53.6% of high school (HS) students have used at least one form of tobacco in their lifetime. Cigarettes are the most often tried form of tobacco followed by cigars, smokeless tobacco (such as chewing tobacco, snuff or dip), bidis (hand-rolled flavored cigarettes from India), and Kreteks (clove cigarettes).

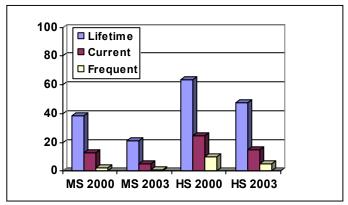
Current tobacco users are those who have used a tobacco product on at least one of the past 30 days. In Hawaii, 8.4% of MS and 18.7% of HS students are current tobacco users. Cigarettes are the most prevalent form at 5.3% for MS and 14.9% for HS, followed by cigars (2.1% and 5.1%), smokeless tobacco (SLT) (1.7% and 2.8%), pipes (2.8% and 4.1%) and bidis (2.2% and 3.9%).

Frequent tobacco users are those who have used a tobacco product on 20 or more of the past 30 days. In Hawaii, less than 1% of MS and 5.4% of HS students smoked cigarettes frequently. Less than 0.8% of HS and 0.5% of MS students frequently used any other form of tobacco.

¹ Centers for Disease Control and Prevention. Tobacco use, access, and exposure to tobacco in media among middle and high school students—United States, 2004. MMWR 2005:54:297-301.

Cigarette Smoking 2000 and 2003

Between 2000 and 2003 current cigarette smoking decreased almost 60% among MS students and almost 40% among HS students. During the same time period, current use of any tobacco product decreased 46% in MS and 31% in HS. Hawaii cigarette taxes per pack increased from \$1.00 to \$1.30 or 30% during this time period and the average cost per pack increased from \$4.05 to \$4.72.2



Severity

Despite the fact that Hawaii's youth are increasing rejecting tobacco, cigarette use is still a common and serious problem that exceeds mere experimentation. Among all students, 2.9% of MS and 11.0% of HS have ever smoked cigarettes daily—at least one cigarette per day for 30 days. When they do smoke, about 1 in 10 MS and 1 in 5 HS smokers smoke 6 or more cigarettes a day (10.9% and 21.8%, respectively). Moreover, among those who have ever tried a cigarette, 4.4% of MS and 16.8% of HS smokers have smoked over 100 cigarettes (the equivalent of 5 packs) in their lifetimes. By this measure, they meet the definition of an adult smoker. The proportion of those who have ever smoked daily and youth who meet the adult definition of a smoker have decreased since 2000. However, the desire to smoke everyday among smokers, and the proportion who smoke at least 6 cigarettes per day on the days they smoke have not declined significantly. In MS, 1 in 5 current smokers can't go more than a day without feeling the urge to smoke; this proportion is 3 in 10 for HS.

Age of initiation

The proportion of MS students who smoked a whole cigarette before age 11 has decreased from 10.2% in 2000 to 6.5% in 2003, largely because 79% of MS students have never tried a cigarette. About 8% of HS students who smoked their first cigarette before age 11, 3.3% smoked a cigar and 1.7% used SLT.

Cigarette preferences

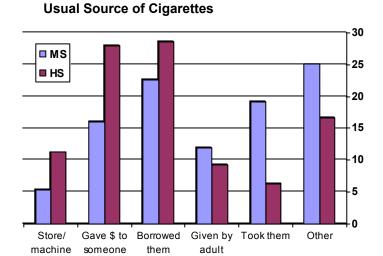
The proportion of HS smokers who usually smoked Marlboro cigarettes dropped from 42.0% to 23.9%. The proportion of MS and HS smokers who usually smoke Camel cigarettes increased and is at 5.9% and 4.9%, respectively. Three-quarters of HS and three-fifths of MS smokers usually smoke menthol cigarettes. Six in ten MS and HS menthol smokers smoke Kool cigarettes (56.1% and 61.1%, respectively.

Access

Hawaii law prohibits the sale of tobacco products to those under 18 years of age. Enforcement efforts to reduce youth access have centered on merchant education, police assisted inspections and SYNAR inspections where young people attempt to purchase cigarettes without identification. As a result the percent of underage smokers who usually get their cigarettes from a store has declined over 50% from 7.4% to 3.2% in MS and from 25.9% to 9.3% in HS.

² Ozechowski and Walker, 2003. The Tax Burden on Tobacco-Historical Compilation. Vol 38. Arlington, Virginia: Orzechowski and Walker Consulting

MS smokers are most likely to get their cigarettes by borrowing them from a friend (22.6%), giving money to someone who is 18 or older (16.0%), taking them from a store or family member (19.2%), receiving them from an adult (11.9%), or getting them "some other way" (25.1%). The main sources of cigarettes among HS smokers are borrowing them (28.6%), giving money to someone of age (28.0%), and getting them "some other way" (16.6%). When they do buy their own cigarettes, 47.5% of HS and 22.5% of MS smokers buy them from a gas station or convenience store. Only 1.2% of them purchase cigarettes over the Internet,



but 56.4% of MS and 32.6% of HS smokers buy their cigarettes from some other source. Approximately, one-third of MS and HS smokers were asked to show an ID when buying cigarettes in the past month and 29.6% of MS and 37.1% of HS underage smokers were refused sale. This suggests that approximately two-thirds of young smokers were not asked to show ID and were able to buy cigarettes illegally. These are very similar to national figures. Discovering these "other" sources will be crucial to further reducing youth access to tobacco.

School

Half as many students in MS and HS reported smoking on school campus in 2003 as in 2000. While only 2.5% of MS and 6.9% of HS students smoked on campus, many (22.0% MS and 34.5% HS) knew school staff or teachers who smoked on campus. Students were asked about their classroom activities or instruction on tobacco during the current school year. Four measures of school instruction on tobacco were assessed: instruction on the dangers of tobacco use, the reasons why young people smoke, and the fact that most people do not smoke, and practicing ways to say no to tobacco in class. The proportion of students who learned about tobacco use in class was generally higher in MS than HS with being taught about the dangers of tobacco use being the highest (55.6% in MS and 41.6% in HS). Only 1 in 4 MS and 1 in 10 HS students were taught that most young people do not smoke. This may contribute to the fact that 49.3% of MS and 82.6% of HS students overestimate the prevalence of smoking in their grade level.³

Cessation

Almost two-thirds of current smokers (MS and HS) want to quit and have tried to quit at least once in the past year. Unfortunately 37.3% of MS and 44.1% of HS smokers were unable to stay quit for a month during their last quit attempt. Most current smokers think that they can quit (80.1% MS and 74.0% HS) but fewer frequent smokers think they would be able to quit (57.7%). One in 5 MS and 1 in 7 HS ever tobacco users have participated in a program to help them quit using tobacco, an increase from 2000.

³ Note: the proportion of students reporting learning about tobacco in class is lower for every indicator in 2003 than 2000, this is may due to the fact that the 2000 survey was administered in the spring when more of the school year had passed and the 2003 survey was administered in October.

Intent to Start Smoking and Smoking Beliefs

The survey asks a series of four questions to assess intent to start smoking and/or strength of resolve to remain smoke-free. While around 4% of never smokers think they will try a cigarette soon, almost three times as many think that they may smoke in the next year (11.8% MS and 13.6% HS). Approximately 16% of each group feels they may be smoking 5 years from now and 11.3% of MS and 12.7% of HS never smokers might smoke if a friend offered them a cigarette. These measures were combined to create a susceptibility index. In all, 19.7% of MS and 20.0% of HS never smokers are susceptible becoming smokers.

Students have a high level of knowledge about the dangers of tobacco. Over 80% of students believe that cigarettes are addictive and that short term (1-2 years) or low level use (less than 5 cigarettes a day) is harmful. Nevertheless, 14% of MS and HS students think that smoking makes young people look cool or fit in and 26.0% of MS and 34.1% of HS students believe that smokers have more friends. One-half of MS and four-fifths of HS students overestimate the prevalence of smoking among their peers.

Social Influences and Adult Counsel on Smoking

Young people are very susceptible to social influences. Only one-quarter of MS students report that one or more of their best friends smoke cigarettes, but three-quarters of smokers have best friends who also smoke. In HS, 2 in 5 students have a best friend that smokes, but 4 in 5 smokers have friends who smoke whereas only 3 in 10 never smokers have friends who smoke. In all 45.6% of MS and 43.5% of HS students live with someone who smokes. Students who live with smokers are more likely to smoke themselves.

Over 8 in 10 students say that their parents or guardians have ever told them not smoke, and 74.2% of MS and 64.5% of HS have discussed smoking with their parents or guardians in the past year. About 3 in 10 students who visited the doctor's office in the past year discussed tobacco with their doctor or the staff (33.8% MS and 28.9% HS—both up from 2000). Among those who saw a dentist in the past year, only 27.3% of MS and 16.8% of HS students discussed tobacco with their provider or the staff.

Mass Media

Hawaii has had a substantial and sustained effort to counter pro-tobacco advertising with mass media campaigns targeted towards youth. As a result, slightly over 70% of MS and 80% of HS students have seen or heard an anti-tobacco commercial or advertisement in the past month, and 2 in 5 students have seen the ads daily. By contrast, about 4 in 5 students often see actors smoking in the movies or on TV and slightly over 1 in 4 see athletes using tobacco on TV. Students in Hawaii are similar to their national counterparts in terms of see actors and athletes smoking. Exposure to messages such as these that normalize tobacco use have decreased in both MS and HS from 2000 to 2003. One in three MS and HS students often see ads for tobacco products when they use the Internet. Hawaii HS students are less likely to see Internet ads than students nationwide (33.9% and 39.2%, respectively) but were more likely to see them in 2003 than 2000 (33.9% and 21.6%, respectively). Among students who go to convenience stores, Mom & Pop stores or gas stations, 75.7% of MS and 83.4% of HS report seeing ads for tobacco products and gear. One in six MS and one in four HS students would use or wear products with tobacco logos on them. In fact, 9.9% of MS and 13.2% of HS students bought or received merchandise with tobacco logos in the past year. Buying or receiving tobacco merchandise decreased 40% among MS and HS from 2000 to 2003. The proportion of students receptive to tobacco advertising also decreased by over 30% to 4.4% of MS and 6.7% of HS students.

Secondhand Smoke (SHS)

Students reporting that SHS is harmful to them remains high with 86.5% of MS and 90.4% of HS students reporting that SHS is definitely or probably harmful to them. The survey covers two measures of SHS exposure in the past week: proximate exposure or being in the same room with someone who was smoking cigarettes, and exposure in a car. (Living with a smoker is covered under social influences because the survey did not include questions about smoking rules in the home.) Both proximate and car SHS exposure decreased by over 15% among MS and HS students from 2000 to 2003. Yet, 40.0% of MS and 57.6% of HS students were proximately exposed in the last 7 days, down from 53.7% and 68.0%, respectively. In the car, 33.0% of MS and 39.3% of HS were exposed to SHS from 40.0% and 49.4%, respectively.

Table 1.	Participant demographics by school type by sex, race,
	ethnicity and grade, HYTS 2003

	Middle S		High School			
		Weighted		nweighted		
7 5 ()	n	%	n 0.575	%		
Total	10,641	100.0	9,575	100.0		
Sex						
Male	5,341	51.8	4,420	46.4		
Female	5,265	48.2	5,100	53.6		
Ethnicity*						
Hawaiian	2,369	24.1	1,983	21.6		
Filipino	2,688	25.7	2,139	23.3		
White	1,570	15.4	1,494	16.1		
Japanese	1,283	12.6	1,470	16.0		
Latino	746	7.0	946	9.9		
Pacific Is	594	6.1	569	6.2		
Chinese	414	4.0	442	4.8		
Grade						
6th	4,240	33.6				
7th	3,242	33.2				
8th	3,041	33.1				
9th	,		2,796	29.5		
10th			2,566	27.1		
11th			2,323	23.6		
12th			1,870	19.8		

Note: Demographic totals may not add to survey participant totals due to skipped questions or unusable answers.

^{*}Based on the most often cited ethnicities given from a combination of two questions where the students were asked to pick **one** group to best describe themselves. They may not add up to the sample total. Hawaiian includes part-Hawaiian, whites are non-Hispanic, and a student may be Latino in conjunction with other ethnicities.

Table 2. Prevalence of selected tobacco indicators by school type, Hawaii YTS 2000 and 2003 and NYTS 2004 **Middle School High School** 2000 2000 2003 2004 2003 2004 **Tobacco Indicator** HI % HI % **US** % HI % HI % US % Prevalence Ever used tobacco (lifetime) 47.8 Cigarettes 38.4 21.1 63.3 19.5 Cigar use 12.6 8.8 27.5 Smokeless tobacco 7.3 8.0 10.4 10.5 Bidis (hand-rolled India cigarettes) 6.1 4.2 13.2 6.9 Kreteks (clove cigarettes) 3.5 2.5 5.5 11.0 Any of the above forms of tobacco 43.5 29.6 67.7 53.6 Used tobacco in past month (current user) 12.9 Cigarettes 5.3 9.8 24.5 14.9 22.5 Cigar use 2.9 2.1 6.0 4.9 5.1 11.6 Smokeless tobacco 2.7 1.7 3.5 3.4 2.8 5.9 **Pipes** 2.9 2.8 3.5 3.7 4.1 3.2 Bidis (hand-rolled India cigarettes) 3.3 2.2 2.4 5.2 3.9 2.6 Any of the above forms of tobacco 15.6 13.3 27.1 18.7 28.2 8.4 Used tobacco >20 days in past month (frequent) Cigarettes 0.9 2.1 10.3 5.4 Cigar use 0.3 8.0 0.8 0.6 Smokeless tobacco 0.3 8.0 0.5 0.5 0.5 0.7 0.5 0.6 Pipes Bidis (hand-rolled India cigarettes) 0.6 0.3 8.0 0.5 Cigarette smoking severity Ever daily smokers (all students) 6.2 2.9 19.8 11.0 Smoke > 6 cigarettes/day (current smokers) 8.9 10.8 25.2 21.8 Smoked > 100 cigarettes (ever smokers) 6.9 4.4 27.0 16.8 Need a cigarette every day (current smokers) 11.9 18.7 34.9 29.8 ns ns Age of initiation Smoked a whole cigarette before age 11 10.2 6.5 8.3 8.6 Smoked a cigar before age 11 4.0 3.1 3.5 3.3 Used smokeless tobacco before age 11 1.9 1.5 1.7 2.5 Cigarette preferences Usual brand of cigarettes No usual brand 12.5 14.5 15.9 5.9 Marlboro 42.0 23.9 17.1 18.6 Newport 3.9 4.4 5.7 4.8 Camel 3.9 5.9 2.7 4.9 All others (incl. Virginia Slims, GPC, Basic, Doral) 61.8 55.2 43.5 53.9 Usually smoke menthol cigarettes 61.5 61.4 76.1 75.8

Table 2. Prevalence of selected tobacco indicators by school type, Hawaii YTS 2000 and 2003 and NYTS 2004 Middle School High School 2000 2004 2000 2003 2004 **Tobacco Indicator** 2003 HI % HI % **US** % HI % HI % US % Usual brand of menthol cigarettes No usual brand 12.9 9.3 na na 61.1 Kool 56.1 na na 8.2 Salem, Newport, and generic brands 10.3 na na Other brand 20.8 21.4 na na Access Usual source of cigarettes for current smokers under 18 years of age Store purchase 7.4 3.2 25.9 9.3 2.2 Vending machines 2.1 3.2 1.9 Gave someone money to buy them 16.3 16.0 25.4 28.0 Borrowed them from someone 28.1 22.6 22.2 28.6 11.9 Given by someone >18 years 4.4 9.7 9.3 Took them from a store or family member 15.5 19.2 2.6 6.3 25.9 25.1 Some other way 10.8 16.6 Place of most recent purchase among current smokers under 18 years 25.5 27.5 Gas station 10.7 11.5 Convenience store 11.0 29.6 20.3 8.0 2.7 11.2 Grocery store 6.7 14.1 8.8 5.5 Drugstore 4.0 4.4 Vending machine 5.3 4.4 1.7 1.5 1.2 Internet 2.7 0.7 1.2 Other 56.4 24.1 32.6 66.7 Asked for ID to buy cigarettes in past month 33.3 26.3 29.4 36.1 35.4 36.1 Refused sale in past month (under 18 years) 28.9 29.6 37.1 37.9 33.6 43.3 School Smoked cigarettes at school in past month 12.2 6.9 5.8 2.5 Know school employees who smoke on campus 22.0 34.5 na na Were taught, this school year, in class about:

79.9

67.7

49.0

15.1

70.2

65.7

37.0

80.0

43.5

na

55.6

43.2

25.2

40.4

16.6

62.6

63.1

37.3

80.1

--

ns

50.9

43.5

23.7

18.1

71.8

71.0

45.1

74.2

58.4

na

41.6

31.3

13.4

7.7

14.7

65.7

68.1

44.1

74.0

57.7

ns

Danger of tobacco use

tobacco use in past year

Cessation

Reasons young people smoke

That most young people do not smoke

Participated in a community event to discourage

Practiced ways to say no to tobacco

Want to stop smoking (current smokers)

Last quit attempt lasted less than 30 days

Think they can guit (current smokers)

Think they can guit (frequent smokers)

Tried to quit in past year (current smokers)

Table 2.	Prevalence of selected	tobacco indicator	s by school type	, Hawaii YTS 2000 and 2	003
8	and NYTS 2004				

and NYTS 2004						
	Middle School			High School		
Tobacco Indicator	2000 HI %	2003 HI %	2004 US %	2000 HI %	2003 HI %	2004 US %
Participated in a program to help them quit						
Ever used tobacco	15.0	22.1		9.9	14.2	
Current tobacco users	14.2	18.2		13.6	15.3	
Intention to start cigarettes smoking among n	ever smo	kers				
Will try a cigarette soon	6.3	4.2		3.3	3.5	
May smoke in the next year	na	11.8		na	13.6	
May be smoking 5 years from now	na	16.1		na	16.6	
Might smoke if offered by a friend	na	11.3		na	12.7	
Susceptible to starting smoking	26.1	19.7		22.9	20.0	
Smoking Beliefs						
Percent who agree with the following:						
Smokers have more friends	29.1	26.0		27.1	34.1	
Smoking makes young people look cool/fit in	14.7	14.1		14.6	14.6	
People can get addicted to cigarettes	91.1	88.0		91.3	87.9	
It is safe to smoke for 1-2 years then quit	14.4	11.5		13.9	12.5	
Smoking 1-5 cigarettes per day is harmful	87.0	84.3		90.6	89.9	
Overestimate the number of smokers in their						
grade level	na	49.3		na	82.6	
Social Influences						
One of more best friends smoke cigarettes						
All students	37.8	24.8		53.1	44.3	
Never smokers	25.6	17.0		33.5	29.1	
Current smokers	75.8	74.1		77.8	84.6	
Lives with someone who smokes cigarettes						
All students	46.1	45.6		45.3	43.5	
Never smokers	37.6	41.2		38.4	34.2	
Current smokers	63.8	67.3		54.2	59.2	
Adult Counsel on Smoking						
Parents/guardians ever told them not to smoke	83.3	86.8		80.4	82.3	
Parents discussed smoking with them in past						
year	66.4	74.2		63.3	64.5	
Doctor/staff discussed dangers of tobacco in						
past year (among those who went to a doctor)	24.5	33.8		25.0	28.9	
Dentist/staff discussed dangers of tobacco in						
past year (among those who went to a dentist)	20.6	27.3		17.2	16.8	

Table 2. Prevalence of selected tobacco indicators by school type, Hawaii YTS 2000 and 2003 and NYTS 2004

	Middle School			High School		
Tobacco Indicator	2000 HI %	2003 HI %	2004 US %	2000 HI %	2003 HI %	2004 US %
Mass Media						
Antismoking commercial/ad exposure						
At least once in the past month	72.5	71.8		78.7	80.1	
Daily during the past month	38.9	38.5		40.7	41.4	
Often see actors smoking in movies or on TV	80.6	76.8	77.9	89.5	84.4	86.5
Often see athletes using tobacco on TV	35.4	28.3		33.3	26.4	
Often see tobacco product ads on the Internet	32.9	31.7	34.1	21.6	33.9	39.2
See tobacco products/gear ads at local stores or						
gas stations	75.3	75.7		82.2	83.4	
Bought or received merchandise with a tobacco						
logo in the past year	16.2	9.9		22.5	13.2	
Would wear apparel with tobacco logos	20.8	16.3		31.6	23.7	
Receptive to tobacco advertising	6.5	4.4		10.8	6.7	
Secondhand Smoke (SHS)						
Think SHS is harmful	89.3	86.5		91.7	90.4	
Exposed to SHS in a room in the past week	53.7	40.0		68.0	57.6	
Exposed to SHS in a car in the past week	40.0	33.0		49.4	39.3	